

表2 近年来的部分转基因优质水稻实验

Table 2 Experiments of several transgenic rice with good quality in recent years

外源基因 Exogenous genes	基因来源 Genetic Source	基因转化方法 Transformation method of genes	基因功能 Genetic function	参考文献 References
<i>psy</i>	黄水仙 Daffodil	基因枪法 Method of gene bombardment	编码一种关键的控制维生素A原合成的中间体 A key intermediate controlling synthesis of provitamin of vitamin A	Burkhart et al., 1997
<i>fer</i>	大豆 Soybean	农杆菌介导法 Method of agrobacterium-mediated transformation	编码一种铁原子贮藏蛋白 A Fe ⁺ storage protein	Fumiyuki et al., 1999
<i>lys</i>	四棱豆 Psophocarpus tetragonolobus	基因枪法 Method of gene bombardment	高赖氨酸蛋白 Lysine-rich protein	Gao et al., 2001
<i>sb401</i>	马铃薯花粉 Potato pollen	农杆菌介导法 Method of agrobacterium-mediated transformation	高赖氨酸蛋白 Lysine-rich protein	王为民等, 2005 Wang et al., 2005
<i>LRP</i>	四棱豆 Psophocarpus tetragonolobus	农杆菌介导法 Method of agrobacterium-mediated transformation	高赖氨酸蛋白 Lysine-rich protein	Tang et al., 2006
<i>hLF</i>	人 Human	基因枪法 Method of gene bombardment	参与铁的转运 Involved in the transport of metal ions	Suzuki et al., 2003
<i>gly</i>	大豆 Soybean	农杆菌介导法 Method of agrobacterium-mediated transformation	大豆球蛋白 Glycinin	张宪银等, 2001 Zang et al., 2001
<i>b-conglycinin</i>	大豆 Soybean	农杆菌介导法 Method of agrobacterium-mediated transformation	β伴大豆球蛋白 (7S球蛋白) 7S Glycinin	Takayasu et al., 2009
<i>ADPglcp</i>	大肠杆菌 Escherichia coli	农杆菌介导法 Method of agrobacterium-mediated transformation	稻米淀粉的调控 Regulation of rice starch	Yasuko et al., 2009
<i>GmFAD3</i>	大豆 Soybean	农杆菌介导法 Method of agrobacterium-mediated transformation	大豆微粒体的Ω3脂肪酸脱氢酶, 提高种子含油量 Ω3fatty acid desaturase soybean microsome, improving oil content of seed	Anai et al., 2003
<i>OASA1</i> <i>OASA2</i>	<i>and</i> 水稻 Rice	农杆菌介导法 Method of agrobacterium-mediated transformation	水稻(邻)氨基苯甲酸盐(或酯)合成酶, 促进色氨酸的积累 Aminobenzoate synthase of rice, improving tryptophan accumulation	Yuzuru et al., 2001
<i>mGLP-1</i>	动物 Animals	农杆菌介导法 Method of agrobacterium-mediated transformation	胰高血糖素, 提高血糖水平 Glucagon, improving blood sugar levels	Hiroshi et al., 2006

续表2

Continued table 2

外源基因 Exogenous genes	基因来源 Genetic Source	基因转化方法 Transformation method of genes	基因功能 Genetic function	参考文献 References
<i>Anti-Wax</i>	水稻 Rice	农杆菌介导法 Method of agrobacterium-mediated transformation	降低稻米中直链淀粉的含量 Reduction of Amylose content of rice	Liu et al., 2003
<i>CTB</i>	霍乱弧菌 Bacillus comma	农杆菌介导法 Method of agrobacterium-mediated transformation	霍乱毒素B亚基, 口服疫苗 Cholera toxin B subunit, oral vaccine	Tomonori et al., 2007
<i>shGH</i>	人工合成 Artificial Synthesis	基因枪法 Method of gene bombardment	人生长激素, 促进蛋白质的合成、细胞的分裂, 新陈代谢 Human growth hormone, promoting protein synthesis, cell division and metabolism	Kim et al., 2008